## ABSTRACT

A coke oven and a method of operating the same, capable not only of achieving a uniform combustion temperature heightwise within a combustion chamber when a rich gas or a lean gas is burnt, but also of reducing NO<sub>x</sub> content in the waste gas, while eliminating localized high-temperature combustion. The combustion chamber of the coke oven comprises a rich-gas port 2 located near an oven wall 6 bordering a carbonization chamber in the bottom 5 of combustion chamber, and the midpoint P3, connecting the center P2 of a lean-gas port 7 and the center P of an air port 3, is on the side opposite to the rich-gas port 2 relative to the center line CL of the combustion chamber. (See FIG. 2)

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